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EXAMINER

WANG, JIN CHENG

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 11/17/2003

17

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/072,043

Applicant(s)

PRIEM, CURTIS R.

Examiner

Jin-Cheng Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/06/2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-54 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-54 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The amendment filed on 10/06/2003 has been entered. Claims 1-54 are pending. Claims 1-3, 26-28 and 48 have been amended.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).
3. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application, and all other rejections have been overcome. See 37 CFR 1.130(b).
4. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).
5. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Pat. No. 6,421,059. Although

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the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 1 constitute a subset of the elements of the patented claim 1. To be more specific, the present application set forth the first element which recites the claim limitation of "a first memory having stored therein a data structure, the data structure including at least one font array" which corresponds to the patented claim 1's first element which set forth the limitation of "a data structure located within a memory or other memories; the data structure including a plurality of font arrays". The present application recites "a graphics controller coupled to the first memory, the graphics controller accessing a font array included in the data structure, the graphics controller comprising a second memory for holding information read from the font array" which corresponds to both first element and the second element of the patented claim 1 because the second element of the patent claim 1 set forth the claim limitation of "a graphics controller for accessing said plurality of font array and for rendering characters into the appropriate locations of a memory or other memories, the graphics controller further including a set of registers for utilizing the information within the plurality of font arrays such that font characters can be efficiently retrieved from memory and can then be rendered in the memory" which establishes the interrelationship between the graphics controller and the first memory, i.e., the graphics controller for accessing, rendering characters into a memory (a first memory) and retrieving from memory (first memory) the font characters implies that the graphics controller is coupled to the first memory. Furthermore, "a set of registers" set forth in the patent claim 1 corresponds to the second memory of the present application's claim 1 and "a font array included in the data structure" as recited in the second element of the present application's claim 1 is already given in the first element of the patented

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claim 1. Therefore, it would have been obvious to one of ordinary skill in the art to make the claim made in this application, because it is only a subset of what has been claimed before.

6. Claim 2 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 2 encompasses the same scope of invention of the present application's claim 1 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 2.

7. Claim 3 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 3 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 3 encompasses the same scope of invention of the present application's claim 1 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 3.

8. Claim 4 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 4 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 4 encompasses the same scope of invention of the present application's claim 1 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 4.

9. Claim 5 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4 and 5 of U.S. Pat. No. 6,421,059.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 5 encompasses the same scope of invention of the present application's claim 4 which corresponds to the patented claim 1 and 4 except additional claim limitation which is recited in the patented claim 5.

10. Claim 6 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 4 and 6 of U.S. Pat. No. 6,421,059.

Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 6 encompasses the same scope of invention of the present application's claim 4 which corresponds to the patented claim 1 and 4 except additional claim limitation which is recited in the patented claim 6.

11. Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 7 encompasses the same scope of invention of the present application's claim 1 except additional claim limitation which is recited in the patented claim 1.

12. Claim 8 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 7 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 8 encompasses the same scope of invention of the present application's claim 7 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 7.

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13. Claim 9 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7 and 8 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 9 encompasses the same scope of invention of the present application's claim 8 which corresponds to the patented claim 1 and 7 except additional claim limitation which is recited in the patented claim 8.

14. Claim 10 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 7-9 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 10 encompasses the same scope of invention of the present application's claim 9 which corresponds to the patented claim 1 and 7-8 except additional claim limitation which is recited in the patented claim 9.

15. Claim 11 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7-8 and 10 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 11 encompasses the same scope of invention of the present application's claim 9 which corresponds to the patented claim 1 and 7-8 except additional claim limitation which is recited in the patented claim 10.

16. Claim 12 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7-8 and 11 of U.S. Pat. No.

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6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 12 encompasses the same scope of invention of the present application's claim 9 which corresponds to the patented claim 1 and 7-8 except additional claim limitation which is recited in the patented claim 11.

17. Claim 13 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 7-8 and 12 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 13 encompasses the same scope of invention of the present application's claim 9 which corresponds to the patented claim 1 and 7-8 except additional claim limitation which is recited in the patented claim 12.

18. Claim 14 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 14 encompasses the same scope of invention of the present application's claim 7 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 1.

19. Claim 15 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 13 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 15 encompasses

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the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 13.

20. Claim 16 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 14 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 16 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 14.

21. Claim 17 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 15 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 17 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 15.

22. Claim 18 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 16 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 18 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 16.

23. Claim 19 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 17 of U.S. Pat. No. 6,421,059.

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Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 19 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 17.

24. Claim 20 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 18 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 20 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 18.

25. Claim 21 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 19 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 21 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 19.

26. Claim 22 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 20 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 22 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 20.

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27. Claim 23 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 21 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 23 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 21.

28. Claim 24 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 22 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 24 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 22.

29. Claim 25 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 23 of U.S. Pat. No. 6,421,059. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reason: The elements of the present application's claim 25 encompasses the same scope of invention of the present application's claim 14 which corresponds to the patented claim 1 except additional claim limitation which is recited in the patented claim 23.

30. Claim 26:

The claim 26 is a rephrasing of claim 1 in a method form. The claim 26 is subject to the same rationale of rejection as set forth in claim 1.

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Claims 27-36:

Claims 27-36 is a rephrasing of claims 2-11 in a method form. The claim is subject to the same rationale of rejection as set forth respectively in claims 2-11.

Claims 37-43:

Claims 37-43 is a rephrasing of claims 14-20 in a method form. The claim is rejected for the same reason as set forth respectively in claims 14-20.

Claims 44-47:

Claims 44-47 is a rephrasing of claims 22-25 in a method form. The claim is rejected for the same reason as set forth respectively in claims 22-25.

Claims 48-54:

Claims 48-54 encompass the same scope of invention as that of claims 1-19. The claims are rejected for the same reason as set forth in claims 1-19.

Claim Rejections - 35 USC § 102

31. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

32. Claims 1-54 are rejected under 35 U.S.C. 102(b) as being anticipated by Lobodzinski U.S. Patent No. 5,734,873 (hereinafter Lobodzinski).

33. Claim 1:

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Lobodzinski teaches a system for rendering fonts (see figure 1 of the reference, column 1, lines 53-67, column 2, lines 1-6, column 2, lines 40-57) the system comprising:

A first memory (e.g., frame buffer 56 of figure 2; column 2, lines 58-67; column 3, lines 1-10) having stored therein a data structure (e.g., figures 3-7, column 3, lines 11-33; column 4, lines 1-4), the data structure including at least one font array (e.g., font 1 of reference sign 62a and font 2 of reference sign 62b of figure 3 in the reference); and

A graphics controller (e.g. the graphics engine 48 of figure 2) coupled to the first memory (e.g., a separate memory similar to frame buffer 56 or the frame buffer memory 56; see column 3, lines 4-5), the graphics controller accessing a font array of the data structure (e.g., figure 2), the graphics controller comprising a second memory (e.g., a set of registers within TEXT ENGINE 52 and SS Expand BLT, figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25) for holding information read from the font array (e.g., the font array within Frame Buffer 56 of figure 2; the set of registers for holding information read from the font array in Character font information 62 of figure 3A and 4A; see also figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25).

- In addition to the rationale of rejection set forth in above, the Examiner also notes that elements of the graphics controller shown in discrete components in the reference can be combined in a variety of fashions and should be still within the scope of Lobodzinski's invention, e.g., the register file 46 and the

frame buffer 56 could be integrated with the graphics engine 48 and can be included in the graphics engine 48 (see column 3, lines 4-5).

- The Examiner further notes that the reference implicitly teaches that a graphics controller increases the speed of certain operations and displays selected operations at high speed rather than using the CPU to perform the operation (see the summary of the reference, and column 1, lines 13-49).

Claim 2:

The claim 2 encompasses the same scope of the invention as that of claim 1 except additional claimed limitation of "a frame buffer." However, Lobodzinski further discloses claimed invention of a frame buffer (e.g., reference numeral 56 of figure 2).

Claim 3:

The claim 2 encompasses the same scope of the invention as that of claim 1 except additional claimed limitation of "a system memory." However, Lobodzinski further discloses claimed invention of a system memory (e.g., reference numeral 24 of figure 1 or reference numeral 56 of figure 2).

Claim 4:

The claim 4 encompasses the same scope of the invention as that of claim 1 except additional claimed limitation of "a plurality of characters." However, Lobodzinski further

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discloses claimed invention that font 1 comprises a plurality of characters C0-C256 and font 2 comprises a plurality of characters C0-C96 (e.g., figure 3A). Therefore, the claim 4 is rejected for the reason as set forth above.

Claim 5:

The claim 5 encompasses the same scope of the invention as that of claim 4 except additional claimed limitation of “each of the characters comprises one bit per pixel.” However, Lobodzinski further discloses claimed invention that each of the characters C0-C256 comprises one bit per pixel (e.g., figure 3A). Therefore, the claim 5 is rejected for the reason as set forth above.

Claim 6:

The claim 6 encompasses the same scope of the invention as that of claim 4 except additional claimed limitation of “each of the characters comprises a plurality of bits per pixels.” However, Lobodzinski further discloses claimed invention that each of the characters C0-C256 comprises a plurality of bits per pixel (e.g., figure 3B). Therefore, the claim 6 is rejected for the reason as set forth above.

Claim 7:

The claim 7 encompasses the same scope of the invention as that of claim 1 except additional claimed limitation of “at least one font array comprises a plurality of font arrays.” However, Lobodzinski further discloses claimed invention that at least one font array comprises

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a plurality of font arrays (e.g., figure 4A). Therefore, the claim 7 is rejected for the reason as set forth above.

Claim 8:

The claim 8 encompasses the same scope of the invention as that of claim 7 except additional claimed limitation of “each of the plurality of font arrays includes a plurality of characters.” However, Lobodzinski further discloses claimed invention that each of the plurality of font arrays includes a plurality of characters (e.g., figures 3B and 4B). Therefore, the claim 8 is rejected for the reason as set forth above.

Claim 9:

The claim 9 encompasses the same scope of the invention as that of claim 8 except additional claimed limitation of “characters within different font arrays can be different sizes.” However, Lobodzinski further discloses claimed invention that characters within different font arrays can be different sizes (e.g., figures 4B and 5). Therefore, the claim 9 is rejected for the reason as set forth above.

Claim 10:

The claim 10 encompasses the same scope of the invention as that of claim 9 except additional claimed limitation of “each of the characters comprises a bit per pixel.” However, Lobodzinski further discloses claimed invention that each of the characters comprises a bit per pixel (e.g., figures 4B and column 4, lines 5-21). Therefore, the claim 10 is rejected for the reason as set forth above.

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Claim 11:

The claim 11 encompasses the same scope of the invention as that of claim 9 except additional claimed limitation of "each of the characters comprises a plurality of bits per pixel." However, Lobodzinski further discloses claimed invention that each of the characters comprises a plurality of bits per pixel (e.g., column 5, lines 54-65). Therefore, the claim 11 is rejected for the reason as set forth above.

Claim 12:

The claim 12 encompasses the same scope of the invention as that of claim 9 except additional claimed limitation of "each of the characters includes size height information." However, Lobodzinski further discloses claimed invention that each of the characters includes size height information (e.g., column 6, lines 60-65). Therefore, the claim 13 is rejected for the reason as set forth above.

Claim 13:

The claim 13 encompasses the same scope of the invention as that of claim 9 except additional claimed limitation of "each of the characters includes size width information." However, Lobodzinski further discloses claimed invention that each of the characters includes size width information (e.g., column 6, lines 60-65). Therefore, the claim 13 is rejected for the reason as set forth above.

34. Claim 14:

The claim 14 encompasses the same scope of the invention as that of claim 7 except additional claimed limitation that "the graphics controller comprises a set of registers for

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utilizing the information within the plurality of font arrays such that font characters can be efficiently retrieved and rendered.” However, Lobodzinski further discloses claimed invention in figure 2 where the graphics engine comprises a set of registers inside BLT ENGINE 50, TEXT ENGINE 52 and OTHER ENGINE 54 (e.g., figure 2, TABELE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). It is further noted that elements of the graphics controller shown in discrete components in the reference can be combined in a variety of fashions and should be still within the scope of Lobodzinski’s invention, e.g., the register file 46 could be integrated with the graphics engine 48 and can be included in the graphics controller. Therefore, the claim 14 is rejected for the reason as set forth above.

Claim 15:

The claim 15 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “the set of registers includes a font pointer register.” However, Lobodzinski further discloses claimed invention that the set of registers includes a font pointer register (e.g., figure 2, TABELE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the text font address register as a font pointer register in the claimed invention because the reference teaches that the font address register *points* to an address of the character font set. Therefore, the claim 15 is rejected for the reason as set forth above.

Claim 16:

The claim 16 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “the set of registers includes a font pitch register.” However,

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Lobodzinski further discloses claimed invention that the set of registers includes a font pitch register (e.g., figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the TXE Command Reg1 register as a font pitch register in the claimed invention because the TXE Command Reg1 register has bits information (5-3) of font pitch. Therefore, the claim 16 is rejected for the reason as set forth above.

Claim 17:

The claim 17 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “the set of registers includes an index register.” However, Lobodzinski further discloses claimed invention that the set of registers includes an index register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the TXE String Address register as an index register in the claimed invention that stores address of *character indexes*. Therefore, the claim 17 is rejected for the reason as set forth above.

Claim 18:

The claim 18 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a horizontal information register.” However, Lobodzinski further discloses claimed invention of a horizontal information register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the TXE Destination X register as a horizontal information register in the claimed invention because the TXE Destination X register stores onscreen X location

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(horizontal location) for text string to be drawn in accordance with the table 1 of the Lobodzinski reference. Therefore, the claim 18 is rejected for the reason as set forth above.

Claim 19:

The claim 19 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a vertical information register.” However, Lobodzinski further discloses claimed invention of a vertical information register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Office interprets the TXE Destination Y register as a vertical information register in the claimed invention because the TXE Destination Y register stores onscreen Y location (vertical location) for text string to be drawn in accordance with the table 1 of the Lobodzinski reference. Therefore, the claim 18 is rejected for the reason as set forth above.

Claim 20:

The claim 20 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a linear information register.” However, Lobodzinski further discloses claimed invention of a linear information register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the TXE String Address register or TXE Font Address register as a linear information register in the claimed invention because any of two registers stores *linear* dword address. Therefore, the claim 20 is rejected for the reason as set forth above.

Claim 21:

The claim 21 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a glyph information register which holds character information

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retrieved by the graphics controller based upon the font pointer register.” However, Lobodzinski further discloses claimed invention of a glyph information register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25).

Claim 22:

The claim 22 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a glyph information register which holds character information retrieved by the graphics controller based upon the font pitch register.” However, Lobodzinski further discloses claimed invention of a glyph information register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25).

Claim 23:

The claim 23 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a glyph information register which holds character information retrieved by the graphics controller based upon the index register.” However, Lobodzinski further discloses claimed invention of a glyph information register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25).

Claim 24:

The claim 24 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a size width register.” However, Lobodzinski further discloses claimed invention of a size width register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the TXE Character Count register as a size width register in the claimed invention because the reference teaches that TXE Character Count register is the same as BLT width register and stores

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the number of text glyphs to be drawn. Therefore, the claim 20 is rejected for the reason as set forth above.

Claim 25:

The claim 25 encompasses the same scope of the invention as that of claim 14 except additional claimed limitation of “a size height register.” However, Lobodzinski further discloses claimed invention of a size height register (see figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25). The Examiner interprets the TXE Height register as a size height register in the claimed invention because the reference teaches that TXE Height register is the same as BLT height register and stores the number of scan-lines of text to be drawn. Therefore, the claim 20 is rejected for the reason as set forth above.

35. Claim 26:

The claim 26 is a rephrasing of claim 1 in a method form. The claim 26 is rejected for the same reason as set forth in claim 1.

Claims 27-36:

Claims 27-36 is a rephrasing of claims 2-11 in a method form. The claim is rejected for the same reason as set forth respectively in claims 2-11.

Claims 37-43:

Claims 37-43 is a rephrasing of claims 14-20 in a method form. The claim is rejected for the same reason as set forth respectively in claims 14-20.

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Claims 44-47:

Claims 44-47 is a rephrasing of claims 22-25 in a method form. The claim is rejected for the same reason as set forth respectively in claims 22-25.

Claims 48-54:

Claims 48-54 encompass the same scope of invention as that of claims 1-19. The claims are rejected for the same reason as set forth in claims 1-19.

Remarks

36. Applicant's arguments, filed 10/06/2003, paper number 16, have been fully considered but they are not deemed to be persuasive.

37. Applicant argues in essence with respect to the amended claim 1 and similar claims that:
"Applicant respectfully submits that Lobodzinski does not show or suggest 'a graphics controller coupled to the first memory, the graphics controller accessing a font array included in the data structure, the graphics controller comprising a second memory for holding information read from the font array' as recited in independent Claim 1 (emphasis added)."

This is not found persuasive for the reasons given below.

The examiner will show that Lobodzinski fulfills the claim 1 as currently amended IF the examiner interprets the graphics controller of the claimed invention as the graphics engine 48 of Lobodzinski (see figure 2).

In column 2, lines 35-67, column 3, lines 1-33, column 4, lines 1-33, column 5, lines 34-65, Lobodzinski clearly teaches a graphics engine 48 of figure 2 coupled to the first memory

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(i.e., a separate memory similar to frame buffer 56 or the frame buffer 56 and the frame buffer 56 can be incorporated into the graphics engine 48; see column 3, lines 4-5), the graphics controller (i.e., the graphics engine 48) accessing a font array of the data structure, the graphics controller (i.e., the graphics engine 48) comprising a second memory (the set of registers within the text engine and SS Expand BLT, figure 2, TABELLE I, column 4, lines 30-33, column 5, lines 33-49, column 7, lines 1-59 and column 9, lines 5-25) for holding information read from the font array (i.e., the font array in Character font information 62 of figure 3A and 4A).

Moreover, the examiner notes that elements of the graphics controller shown in discrete components in the reference can be combined in a variety of fashions and should be still within the scope of Lobodzinski's invention, e.g., the register file 46 and the frame buffer 56 could be integrated with the graphics engine 48 and can be included in the graphics engine 48 (see column 3, lines 4-5).

As applied to the present application, Lobodzinski fulfills claim 1 as currently amended.

38. Applicant argues in essence with respect to the amended claim 1 and similar claims that:

"In addition, Applicant respectfully submits that Lobodzinski does not show or suggest 'placing the information read from the font array in a second memory resident on a graphics controller' as recited in independent Claim 1 (emphasis added)."

This is not found persuasive for the reasons given below.

The Examiner notes that the argument shown in above is different from the limitation cited in the amended claim 1 and therefore the Examiner will address the corresponding claim limitation of "the graphics controller comprising a second memory for holding information read

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from the font array". The examiner interprets the information read from font array as any kind or part of font information such as the image data for an arbitrary character. However, this information can be stored in a second memory (e.g., the second memory is interpreted as the set of registers in the TXT ENGINE and SS Expand BLT of the graphics engine 48) resident on the graphics engine 48 of figure 2 (See TABLE I, column 4, lines 30-33, column 5, lines 33-49 and column 7, lines 54-60 of Lobodzinski).

39. Applicant argues in essence with respect to the amended claim 1 and similar claims that:

"Applicant respectfully submits that Lobodzinski does not show or suggest 'wherein glyph information for a character to be rendered, said size width information and said size height information are read to registers that reside on said graphics controller from said data structure' as recited in independent Claim 48 (emphasis added)."

This is not found persuasive for the reasons given below.

As previously addressed, the cited reference teaches that the image (glyph) information for a character to be rendered can be stored in a second memory (e.g., the second memory is interpreted as the set of registers in the TXT ENGINE and SS EXPAND BLT of the graphics engine 48) which is resident on the graphics engine 48 of figure 2 (See TABLE I, column 4, lines 30-33, column 5, lines 33-49 and column 7, lines 54-60 of Lobodzinski).

Conclusion

40. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jin-Cheng Wang whose telephone number is (703) 605-1213.

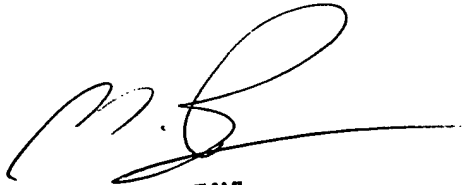
The examiner can normally be reached on 8:00 AM - 4:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mike Razavi can be reached on (703) 305-4713. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-6606 for regular communications and (703) 308-6606 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 395-3900.

jcw
November 13, 2003



MICHAEL RAZAVI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600